

AMENDMENTS TO THE CLAIMS

1. (Original) A computerized medical diagnostic system, comprising:
a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions; and
a script engine operating on a computer and configured to:
repetitively ask questions to elicit responses, the responses establishing symptoms, each established symptom contributing a weight to an accumulated total weight for a disease, and
determine whether the accumulated total weight for a disease reaches or passes a threshold so as to declare a diagnosis.
2. (Original) The system defined in Claim 1, wherein the symptom is established based on a presence or absence of one or more other symptoms.
3. (Original) The system defined in Claim 1, wherein a presence of a selected set of symptoms adds additional weight to the accumulated total weight of at least one of the diseases.
4. (Original) The system defined in Claim 1, wherein a symptom at a first selected time during operation of the diagnostic system is weighted differently than the symptom at a second selected time.
5. (Original) The system defined in Claim 1, wherein the weight of a symptom established at a first severity is different than the weight of the symptom established at a second severity.
6. (Original) The system defined in Claim 1, wherein a selected set of symptoms that occur in a specified sequence over time lends a different accumulated weight to the total weight than an accumulation of the individual weights of the selected set of symptoms that do not occur in the specified sequence.

Appl. No. : 10/656,592
Filed : September 4, 2003

7. (Original) The system defined in Claim 1, wherein a sequence of an onset or ending of a selected set of symptoms lends a different accumulated weight to the total weight than an accumulation of individual weights of the selected symptoms alone.

8. (Original) The system defined in Claim 1, wherein the disease is ruled-in for further diagnostic inquiry based on the accumulated total weight.

9. (Original) The system defined in Claim 1, wherein the disease is ruled-out for further diagnostic inquiry based on the accumulated total weight.

10. (Original) The system defined in Claim 1, wherein questions for diseases deemed urgent are asked before questions for non-urgent diseases.

11. (Original) The system defined in Claim 1, wherein the script engine is further configured to determine whether the accumulated total weight for a disease reaches or passes a rule-out threshold so as to eliminate a possible diagnosis.

12. (Original) The system defined in Claim 8, wherein a degree of certainty of ruling-in the disease is provided.

13. (Original) The system defined in Claim 9, wherein a degree of certainty of ruling-out the disease is provided.

14. (Original) The system defined in Claim 1, wherein a plurality of diagnoses, each diagnosis having a degree of certainty, are accumulated into a patient specific differential diagnosis list.

15. (Original) The system defined in Claim 1, wherein the script engine is configured to repetitively ask questions to elicit responses from a patient.

16. (Original) A computerized medical diagnostic method, comprising:
providing a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions; and

executing a script engine on a computer comprising:
repetitively asking questions to elicit responses;
establishing symptoms based on the responses;
contributing a weight to an accumulated total weight for a disease based
on each established symptom; and
determining whether the accumulated total weight for a disease reaches or
passes a threshold so as to declare a diagnosis.

17. (Original) The method defined in Claim 16, wherein establishing symptoms
is based on a presence or absence of one or more other symptoms.

18. (Original) The method defined in Claim 16, additionally comprising adding
additional weight to the accumulated total weight of at least one of the diseases based on a
presence of a selected set of symptoms.

19. (Original) The method defined in Claim 16, wherein contributing a weight
comprises weighting a symptom at a first selected time during execution of the script engine
differently than the symptom at a second selected time.

20. (Original) The method defined in Claim 16, wherein contributing a weight
comprises weighting a symptom established at a first severity differently than the weight of the
symptom established at a second severity.

21. (Original) The method defined in Claim 16, additionally comprising
contributing an accumulated weight to the total weight for a selected set of symptoms that occur
in a specified sequence over time that is different than an accumulation of the individual weights
of the selected set of symptoms that do not occur in the specified sequence.

22. (Original) The method defined in Claim 16, additionally comprising
contributing an accumulated weight to the total weight for a sequence of an onset or ending of a
selected set of symptoms that is different than an accumulation of individual weights of the
selected symptoms alone.

Appl. No. : 10/656,592
Filed : September 4, 2003

23. (Original) The method defined in Claim 16, additionally comprising ruling-in the disease for further diagnostic inquiry based on the accumulated total weight.

24. (Original) The method defined in Claim 16, additionally comprising ruling-out the disease for further diagnostic inquiry based on the accumulated total weight.

25. (Original) The method defined in Claim 16, wherein repetitively asking questions comprises asking questions for diseases deemed urgent before questions for non-urgent diseases.

26. (Original) The method defined in Claim 16, additionally comprising determining whether the accumulated total weight for a disease reaches or passes a rule-out threshold so as to eliminate a possible diagnosis.

27. (Original) The method defined in Claim 23, additionally comprising providing a degree of certainty of ruling-in the disease.

28. (Original) The method defined in Claim 24, additionally comprising providing a degree of certainty of ruling-out the disease.

29. (Original) The method defined in Claim 16, additionally comprising accumulating a plurality of diagnoses, each diagnosis having a degree of certainty, into a patient specific differential diagnosis list.

30. (Original) The method defined in Claim 16, wherein repetitively asking questions to elicit responses comprises repetitively asking questions to elicit responses from a patient.

31. (Original) A computer usable medium having computer readable program code embodied therein for performing a computerized process used in medical diagnosis, the computer readable code comprising instructions for:

Appl. No. : 10/656,592
Filed : September 4, 2003

providing a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions; and

executing a script engine comprising:

repetitively asking questions to elicit responses from a patient;

establishing symptoms based on the responses;

contributing a weight to an accumulated total weight for a disease based on each established symptom; and

determining whether the accumulated total weight for a disease reaches or passes a threshold so as to declare a diagnosis.

32. (Original) The computer usable medium of Claim 31, additionally comprising instructions for accumulating a plurality of diagnoses, each diagnosis having a degree of certainty, into a patient specific differential diagnosis list.

33. (Original) A computerized medical diagnostic system, comprising:

a list of diseases, each disease associated with a list of symptoms, and each symptom associated with a list of questions; and

a script engine operating on a computer and configured to:

repetitively ask questions to elicit responses from a patient, the responses establishing symptoms, each established symptom contributing a weight to an accumulated total weight for a disease, and

determine whether the accumulated total weight for a disease reaches or passes a threshold so as to declare a diagnosis.

34. (New) The system defined in Claim 1, wherein at least a portion of the symptoms in the list of symptoms are associated with a plurality of questions to be asked, and wherein weights are assigned to possible responses of the plurality of questions.

35. (New) The system defined in Claim 34, wherein after the plurality of questions are answered, a symptom score is totaled of the weights corresponding to the responses.

Appl. No. : **10/656,592**
Filed : **September 4, 2003**

36. (New) The system defined in Claim 35, wherein the symptom score is compared to a threshold for the symptom, and the symptom is established if the symptom score reaches or passes the symptom threshold.

37. (New) The system defined in Claim 36, wherein the weight of the established symptom is associated with the symptom score.

38. (New) The system defined in Claim 34, wherein at least some of the weights assigned to the possible responses of the plurality of questions have different values.

39. (New) The system defined in Claim 1, wherein the weight contributed by an established symptom is a negative integer.

40. (New) The method defined in Claim 16, wherein the weight contributed by an established symptom is a negative integer.

41. (New) The computer usable medium defined in Claim 31, wherein the weight contributed by an established symptom is a negative integer.

42. (New) The system defined in Claim 33, wherein the weight contributed by an established symptom is a negative integer.